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Doing Business with Digital Documents

Electronic Recording

Electronic recording (e-recording) is the process of digitally creating, submitting, and recording legally binding land ownership records. E-recording is more than just converting a paper document to an electronic image for storage. The process encompasses the use of several technologies that allow those involved to create, sign, transmit, record, index, archive, and return the original document—all without ever touching a piece of paper. However, before we examine the new electronic process, let's take a look at the history of American document recording and examine the current paper process.

Recording refers to the act of receiving, process-ing, and safekeeping official public information in accordance with local, state, and federal law. Most recorded documents deal with the ownership and transfer of personal and real property. The act of recording is important because it establishes an archive of documents that ensures, the rights and entitlements of property owners.

Once a document is recorded, attorneys, land title examiners, businesses, historians, and members of the general public can use the information to verify or determine property ownership. From a real estate perspective, virtually any transaction involving real property involves the county recorder's office. Recorded information makes it possible to establish a history of property ownership that informs potential property owners of any debts or encumbrances against a property. Without the work of county recorders, it would be almost impossible to purchase real estate and be assured of a clear title to the land.

The history of county recording

The act of recording documents is among the oldest governing functions in the United States, predating even the creation of county governments. American document recording started in Virginia's Jamestown colony in 1624 with the initiation of court hearings. The court clerk was responsible for recording important information on a monthly basis.

Communities in the Plymouth and Massachusetts Bay colonies recorded some of the earliest land title documents, land grants from towns to individuals. These property transfers were documented in the record books of the town and colony. In 1634, the general court of Massachusetts Bay colony conducted one of the nation's first property surveys. Information derived from this survey was recorded and maintained by both town and colony governments. In 1640, the general court of the Massachusetts Bay colony adopted the first modern recording act. By 1650, the responsibility for recording documents had passed from the colony level to the local level. The Massachusetts Bay Colony transferred the recording function from its general court to the shire (or county) court.

Today, document recording continues to be a county responsibility in most parts of the country. Though recorders' tasks vary between counties and states, most of the documents that they work with relate to real estate transactions, such as deeds, mortgages, liens, easements, and subdivision plats. Over the last several hundred years, the pattern and process of recording has been well established. However the process—and indeed, in many cases, the tools—have changed very little from those used in colonial times.

The paper process

Recording generally consists of two connecting processes: document origination and document

recording. It commonly requires two to three working days to record and process a document, although some county offices may take months due to large backlogs. The following discussion illustrates the typical paper recording model. The actual process may vary slightly from county to county, depending on local laws and practices.

Prepare the document

1. **Create the document.** There are numerous document creation methods. These methods vary from paper-based forms to electronic document generation systems. The format of each document must match the business rules and recording criteria for the specific county where it will be recorded. This necessitates maintaining multiple forms or templates and making sure the correct form is used in the preparation process.

2. **Review the document**. Once all of the appropriate information is included in a document, it is reviewed for accuracy and completeness. If anything is missing or incorrect, the document is corrected and reviewed again.

3. **Sign and notarize the document.** When a document passes the review, it is signed and notarized by the appropriate individuals. With the signatures and seals, the document is now ready to be delivered to the recording office.

Deliver the document

Document delivery may take several forms, based on the proximity of the recording office and the urgency of the filing. Some businesses employ full-time runners who deliver documents for recording several times throughout the day. Other businesses may mail their documents or send them via a delivery service such as UPS, FedEx, or a local courier. All of these methods involve time, money, and personnel.

At this point, the document leaves the originator's control and passes into the public domain. While a person may hand-carry the document to the recorder's office, the remaining steps are performed by recording personnel.

Record the document

1. **Receive and examine the document.** At the recorder's office, the clerk receives the document and examines it to make sure it meets all of the necessary recording criteria. If there are no problems with the document, it proceeds to the next step.

   If there is a problem with the document, it is rejected. Rejected documents must be returned to the originator. When a document is delivered in person, the recorder can simply hand it back. However, if a document was delivered by mail, it has to be returned by mail or some other delivery service, which can lead to significant delays.

2. **Calculate fee.** After the document is accepted, the clerk counts the pages and assesses the appropriate fee. Most fees are based on the type of document and number of pages. The page count can be

affected by formatting, white space, signature blocks, and other variables. The payment formula and variables are unique from county to county.

3. **Payment.** Recording offices require that payment accompany each document. This is simple when a document is presented in person. The clerk accepts the payment and gives the person a receipt. However, when the document is delivered by mail or some other service, incorrect payments may result in a rejected document and more delays.

4. **Endorse the document.** Once the document is accepted and paid for, it is endorsed by the recorder. The endorsement generally consists of a stamp, a date and time, an entry number, an assigned book and page number (a recording convention) and the recorder's signature and seal

At this point, the document is considered legally recorded. However, the process is far from complete. If you are presenting the document in person, the recorder's office takes your money and the document and you go home (or back for more documents). You will eventually receive the official document, but not before the recording office has spent considerable additional time processing it.

Process the document

1. **Index the document.** After recording, the receiving clerk generally puts the document into a stack to be reviewed later. As members of the office staff review the recorded documents, they generate a document index so others can retrieve the documents when needed. This process may be manual, with the indices kept in physical ledgers, or electronic, with the information entered into a computer database. If it is a busy recording office, the indexing of documents may take anywhere from days to months. Until the document is indexed and the next step completed, the document is unavailable to other parties who may need to review it.

2. **Duplicate/image the document.** The recorder's office keeps a duplicate of the original document in its books. For those offices that have not yet been computerized, these archives are often bound volumes of recorded documents. However, some offices now create electronic images of original documents and file the images, not the paper. Some offices may do both. Whatever the process, each document is duplicated or scanned and copies are placed in the archives. Additional copies are distributed to other county departments such as the assessor or the platting department.

Return the document

The recording office is now finished with the original document. A member of the office staff will generally return the original document and recording receipt to the originator (or designated receiver) via mail. By the time the originator receives the recorded document back, several months may have passed.

Using technology to improve the process

For several hundred years, pen and paper were the tools of the trade for county recorders. Original, handwritten documents (such as U.S. Surveyor's field notes, military land grants, deeds, mortgages,

releases, judgements, and so on) were stored in filing cabinets and indexed in Original Tract books, Grantor/Grantee books, Mortgagor/Mortgagee books, and other official ledgers.

As technology progressed, people began using printed forms to standardize the appearance of the information. The next step was the typewriter, replacing handwritten forms and notes. In the mid-twentieth century, microfilm provided a more efficient storage medium for recorded documents. As computers began appearing in recording offices, counties began to maintain faster and more efficient indices. Recent advances in document imaging technology have allowed recorded papers to make their way to the computer as well.

In busy population centers, recording offices constantly struggle to keep up with the never-ending flow of documents. In order to meet the growing demands of their constituencies and to comply with local laws and regulations, many recording offices are very willing to take advantage of new technologies in order to provide more efficient service and make their jobs easier.

With the rise of the Internet, many counties now provide access to stored documents from county web sites or by using subscription-based services. The next logical step is to move the entire recording process out of the seventeenth century and into the digital age. The adoption of new document and information collaboration standards, coupled with digital signature technology, finally provides a viable framework for electronic recording, totally eliminating the need for any paper-based processing.

The electronic process

Over the centuries, the recording process has been streamlined to the bare essentials. Whether paper-based or digital, the process is fairly stable. The digital difference is that all of the steps take place electronically, perhaps automatically, without ever using a single sheet of paper. The entire process can be completed in just minutes with fewer document errors and no transcribing errors.

Prepare the document

1. **Create the document.** Using an e-recording solution, the required document is created electronically from a pre-approved template. Individual templates can be configured to meet the submission requirements for a specific county. The process is simply a matter of filling in the blanks. The templates maintain the proper formats and request all the necessary information. Use of these templates can greatly reduce errors in document creation and increase document acceptance at the recording office.
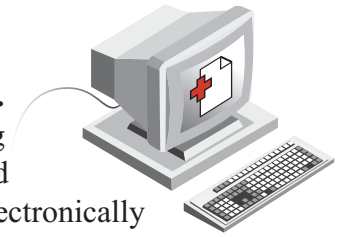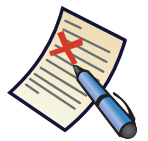
2. **Review the document.** The completed document is reviewed by the appropriate parties. This step can also be done online. Rather than moving the document from desk to desk, the people involved simply call up the document on their computers and review the information. Corrections can be made immediately and are instantly reflected in the document.

3. **Sign and notarize the document.** The responsible parties then electronically sign the document, verifying acceptance of the contents. The signed document is then signed again by a notary public, creating a digital notary stamp. For more information on this topic, see "Digital

Signatures," another discussion paper in The Ingeo Education Series.

4. **Examine.** The completed document is analyzed and checked using the recording office's criteria. If there are no errors, the completed document is now ready to be transmitted to the recording office.

5. **Calculate fee and attach payment.** Using the recorder's fee schedule, the document preparation system can calculate the appropriate charges. This takes the guesswork out of fee calculations, greatly reducing the number of documents rejected for insufficient payment.

While these first steps are easier with digital tools, the most noticeable benefits occur in the remaining steps: the delivery and recording of the prepared documents.

Transmit the document

The completed document is transmitted electronically (generally over the Internet) to the desired county recording office. When transmitted electronically, the document arrives in seconds. This eliminates the necessity and expense of couriers, runners, or other delivery mechanisms and removes one of the major time constraints.

We now shift to the recorder side of the process.

Record the document

1. **Receive and examine the document.** The incoming document is examined at the recording office for accuracy and compliance with local recording regulations. Since the incoming document is completely digital, it can be analyzed without any human intervention. However, the option still exists for manual document review as needed or desired.

2. **Calculate and accept payment.** Since both sides use the same fee calculations, the payment attached should match the payment required.

3. **Endorse the document.** Once the document and payment are accepted, the document is endorsed, including the recorders digital signature.

4. **Generate the receipt.** The receipt contains the payment and endorsement information for the recorded document. It is a separate record that is returned with the official document at the end of the process.

Process the document

1. **Index the document.** What has previously been a manual and time-consuming process is now done in seconds. The indexing information is already tagged in the electronic document. This information is simply filed in the digital document storage and retrieval system for quick and easy access. Since the index information is passed electronically, there is less chance for error, resulting in more complete, accurate indices.

2. **Image the document.** Most digital document storage systems maintain an image of the document on file. To meet that requirement, an image

of the document is generated and stored for later viewing. People who need to view the document can access the image and print it as needed.

Return the document

An endorsed copy of the electronic document is now returned to the recipient, along with the receipt. The return takes place using the same transmission medium as the incoming transaction, usually the Internet.

With the data-processing capabilities of today's computer systems, the entire recording and filing process can take place in seconds, not hours or days. The complete turnaround time from submission to return is effectively reduced to minutes instead of months. In addition, the process is more accurate, with fewer rejections because of incorrect formats, incomplete information, or insufficient payment.

Electronic recording benefits

Given many people's inherent distrust of computers and technology in general, why would anyone want to entrust such critical processes to electronic records? The most obvious reason is time. Filing documents the old-fashioned way requires the intervention of many people, and takes a lot of time to:

- Transport the documents
- Accept and examine the documents
- Apply the endorsement information
- Image, index, and file the recorded documents
- Locate and retrieve the original paper, when needed

All of this amounts to a significant dedication of both resources and money to accomplish a very simple, repetitive task.

By implementing e-recording technologies, everyone saves.

Document originators:

- Reduce document errors
- Reduce payment errors
- Eliminate mailing or other document transport fees
- Reduce document delivery time

Recording offices:

- Record documents faster, with lower per-document cost
- Generate fewer rejections due to incorrect formats and/or fees
- Reduce indexing, imaging, and filing time
- Eliminate possibility of errors through multiple-data entry points

All of these benefits result in greater efficiency and better use of existing resources. By minimizing time requirements, reducing costs, and increasing acceptance and accuracy, everyone involved is more productive and better able to do their jobs.

Legal requirements

While electronic recording follows the same process as paper-based recording, there are legal requirements that must be met in order for electronic documents to carry the same legal weight as their paper-based counterparts. By satisfying these requirements, electronic documents can begin to accumulate the same level of trust paper documents have established through centuries of tradition.

Document integrity

The greatest concern among recorders and industry

leaders is document integrity:

- How can the document originator verify that the recorded document is the same as the one submitted?
- How can the recorder verify that the document wasn't modified in transit?

Both of these questions are addressed by recent developments in digital signature technology.

Electronic document content is protected from changes by the application of digital signatures. When a document is digitally signed, the integrity of the signature depends on the integrity of the document. If anything in the document changes after it is signed, the recipient of the signed document will not be able to validate it. If the document fails validation, it is considered void and cannot be recorded.

When the document is validated, the recorder applies another digital signature, thus sealing the contents of the recorded document (including previous signatures and notaries). Digital signatures are very secure and are endorsed as legally binding by federal and state law.

For a complete discussion of legislation related to digital signature technology, see "Electronic Document Legislation," another discussion in the Ingeo Education Series.

Accessibility

Another concern is accessibility. With a paper document, the original, endorsed document is kept in the originator's files. Anyone else who needs access to the document can go to the recorder's office and look it up in an indexed book or hardcopy file. Paper is a very familiar and comfortable

method for people to store important documents.

However, many counties are already converting paper documents to electronic images. The electronic images are easier to locate and faster to retrieve. The paper files are maintained to satisfy legal requirements, but when a document is requested, it is often retrieved and printed from the electronic image rather than the paper original.

With an electronic system, recorded documents are fed directly into the county document imaging and storage systems, complete with a computer generated document image for printing. The recording office is more efficient by not having to convert the original paper document to an electronic image. The endorsed digital file is returned electronically as well, resulting in much faster return of the completed document. This computerized process greatly improves accessibility and eliminates much of the waiting period for people to physically handle, index, image, and archive paper documents.

If the recorders choose, they can print a paper copy and file it with the other paper documents. Printing an electronic document is much easier, faster, and less expensive than converting an existing paper document to an electronic format.

The future of recording

The recording of documents has remained essentially the same for centuries. However, just because the process is the same doesn't mean the tools are. New advances in electronic document technology now make almost instant recording and retrieval possible. These new technologies bring speed, efficiency, and increased accuracy to a traditionally manual and time-consuming process.

Doing Business with Digital Documents

GLOSSARY

digital signature: A digital signature is a series of numbers generated by complex algorithms, and involves encryption technology rather than penmanship. A signature is created by mathematically generating a unique document ID and then encrypting that ID with a signer's private key. The signature is tied to the original document by the ID and to the signer by the encryption key.

electronic recording: Also *e-recording*, the paperless process of digitally creating, submitting, and recording legally binding land ownership documents.

endorse: The application of an official seal and/or signature, indicating acceptance of a legal record. The endorsement generally consists of a stamp, a date and time, an entry number, an assigned book and page number (a recording convention), and the recorders signature.

Internet: A global network of computers that communicate using a networking standard called TCP/IP (Transmission Control Protocol/Internet Protocol).

originator: The individual or company that creates a document to be recorded. Originators are generally lenders, loan servicers, or land title companies.

recording: The act of receiving, processing, and safekeeping official public information (documents) in accordance with local, state, and federal law.

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Ingeo Education Series

The Ingeo Education Series covers technical topics related to electronic recording. This collection of resources is intended to provide information for anyone involved in electronic recording, including loan originators and servicers, and county recorders and their staff members. The following documents are currently available from Ingeo:

Discussion Papers

- Electronic Recording
- Digital Signatures
- Digital Document Standards
- Electronic Document Legislation
- Digital Certificates & Certificate Authorities
- The Three Levels of Electronic Recording

Other Resources

- Glossary of Electronic Recording Terms

About Ingeo

As a leader in the digital document industry, Ingeo helps businesses and government agencies increase efficiency by providing secure electronic document solutions. Ingeo's products create a protected environment for the creation, authorization, validation, and distribution of high-value, high-volume business transactions.

Ingeo applications save time and money by automating traditional paper-based processes. Using the latest digital "smart document" technology, information passes effortlessly between independent parties and systems. Digital signatures and other security standards maintain the integrity of the original documents, providing the same level of trust and non-repudiation as current paper-based processes. Ingeo—doing business with digital documents.